

"Broadband" is, and has always been, a generic marketing term, not a technical one. It has been used and abused by every ISP in existence -- especially in Television commercials. This has been going on since the beginning, when the term was first used to differentiate "some service" as different from dial-up. Consequently, the term means radically different things to the consumer and to the vendor. It has been used by vendors to avoid making any kind of quantifiable statement for which the consumer can verify the claims and hold the vendor accountable. Meanwhile, the technical community sits back and laughs simultaneously at the gullibility of the consumer and the audacity of the vendors to make such meaningless statements.

There is no need to define the term, its use should be eliminated and prohibited.

Instead, providers (and legislation) should be required to state exactly what service(s) they are offering/providing -- technology, medium/media, upload/download speeds, volume restrictions, device, operating system, etc. Comparative terms, high, low, medium, etc should also be prohibited.

In the case where the ISP provides different services to different customers based upon their geographic/physical location, this information should be specific to the geographic/physical area of the customer and should allow comparison by the customer with the service offerings by this ISP in other areas.

[Note that this will also allow regulators to determine how "discriminatory" various offerings are. I.E. how any given ISP provides "better" or different services to customers based on location.]

All this information should be tabular and readily available on the ISP's web site.

Advertised numbers should be verifiable by the use of a "national" test facility such as dsreports.com.

One assumes that a browser based test suite, such as the tools available at dsreports.com, will be functional across all present day platforms. By utilizing an independent third party test facility and suite of tools, the assumption of Vendor bias (and consequent tool tampering) is removed.

Additionally, each ISP should be required to provide a similar "local test facility." (Between the End User and the ISP's gateway to the Internet Backbone -- therefore,

entirely on the ISP's facilities and therefore under their control.)

Most, if not all, issues concerning network latency, packet-loss, variability and the like should be viewed in the context of the vendor's lack of infrastructure. A

"Local test facility" would allow the customer the ability to determine the state of their "local connection" independent of the various end-to-end backbone issues.

This "local test facility" should always give the customer the "rated" results for their connection, as all components of the connection are within the control of the ISP. If it does not, the customer has a valid issue with the vendor.

Time and load-based record keeping will make it obvious if an ISP is failing to provide the infrastructure necessary to support their claims of service. That is to say, if the ISP successfully provides rated services at "off-hours" but fails to provide them during "peak-hours," then the ISP is failing to provide capacity for "peak-load" in its infrastructure.

Is there a need to provide a term(s) to aggregate various levels of service?

One can make the argument that this is not possible because of the nature of the various media involved. If a medium can provide a specific "speed" then it is competitive with other mediums able to provide that same "speed." If it cannot provide that "speed," then it is not.

"Bits-Per-Second" is a term that applies across all mediums. Some media can "move" more BPS than others based upon "today's technologies." "Tomorrow," that can change as signaling technologies are invented or evolve.

Note that "Bits-Per-Second" is an ABSOLUTE term. It is not conditional upon compression algorithms or protocols. It describes the number of Bits which can be moved per unit of time on any given medium.

Other terms, such as "Transfer Rate," can be defined so as to account for compression algorithms, protocol overhead, and the like. The issue of "application sensitivity" to bandwidth becomes obvious here. This also begins to include the issues of latency and packet-loss. The use of the historic term QOS - Quality of Service can be revived.

By eliminating the "threshold" definitions, one eliminates the need to update them over time. By

providing the actual data points -- bits-per-second, and transfer rates, it becomes easy for the application to define what its requirements are and for the consumer to determine if the vendor is providing capacity to support that application.

Not mentioned in the RFC is the issue of products which allow for Specific Levels or Qualities of Service. It is perfectly reasonable for a vendor to establish guarantees of Service Levels or Quality of Service (QOS) providing they are both willing and able to guarantee that QOS end-to-end. Again, such QOS guarantees need to be specifically offered in quantitative, not qualitative terms.